## NEW NAMES AND COMBINATIONS IN MEXICAN ALLOISPERMUM (ASTERACEAE: HELIANTHEAE)

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## ABSTRACT

Six new specific combinations and two new varietal combinations for the genus Alloispermum are proposed, as follows: A. gonzalezae (B. Turner) B. Turner, A. longiradiatum (Urbatsch & B. Turner) B. Turner, A. michoacanum (B.L. Robins.) B. Turner, A. michoacanum var. liebmannii (Schultz-Bip. ex Klatt) B. Turner, A. palmeri (S. Wats. ex A. Gray) Fernandez & Urbatsch, A. palmeri var. lancifolium (Urbatsch & B. Turner) Fernandez & Urbatsch and A. tridacoides (Urbatsch & B. Turner) Fernandez & Urbatsch. All of these are transfers from the genus Sabazia.

KEY WORDS: Alloispermum, Asteraceae, Heliantheae, systematics, México.

As treated by Fernandez & Urbatsch (in manuscript), Alloispermum is a genus of perhaps 14 species, mostly confined to montane habitats of México, Central America and northern South America. It is very closely related to Sabazia and may ultimately encompass that taxon. The two are kept apart largely on features of habit and capitulescence, Alloispermum having rather simple stems that arise from short, stout, subterranean rhizomes and a capitulescence that arises from primary peduncles that branch near the summit forming cymules of 3 to numerous heads. Species of Sabazia, as treated by the present author, have annual taproots or, when perennial, aerial stems arise from slender, wiry, rhizomes, the lower stems often decumbent and rooting at the nodes; in addition, the heads are usually solitary on elongate terminal or axillary peduncles.

Urbatsch & Turner (1975) placed several of the species included here in the genus Sabazia, having removed these from Calea where they were anomalous. Robinson (1978) subsequently resurrected the older generic name, Alloispermum, to house these and we accept the reality that they are properly positioned there. McVaugh (1984), in his usual conservative vein, retained most of the aforementioned anomalies in his heterogeneous Calea, but also maintained

Sabazia (by insertion of the latter within Calca, he creates a phyletically indefensible position). In any case, I intend to retain Calea, Sabazia and Alloispermum in my treatment of the tribe Heliantheae for México, believing these to be separate, closely related phyletic lines. Additional work will be needed to resolve the relationship of the latter two genera with the closely related genera Galinsoga and Schistocarpha, as noted by Fernandez & Urbatsch.

Alloispermum gonzalezae (B. Turner) B. Turner, comb. nov. BASIONYM: Sabazia gonzalezae B. Turner, Phytologia 63:307. 1987.

As noted in my original description, inclusion of this taxon in Sabazia was provisional. A review of the entire Alloispermum-Sabazia-Galinsoga complex now leads me to believe that it is properly positioned in Alloispermum, near A. tridacoides.

Alloispermum longiradiatum (Urbatsch & B. Turner) B. Turner, comb. nov. BASIONYM: Sabazia longiradiata Urbatsch & B. Turner, Brittonia 27:353. 1975.

This species is superficially similar to A. palmeri but differs in its shorter stature, fewer leaves along the stems and much longer rays. On habital features and its branched capitulescence it belongs to Alloispermum.

Alloispermum michoacanum (B.L. Robins.) B. Turner, comb. nov. BA-SIONYM: Sabazia michoacana B.L. Robins., Proc. Amer. Acad. Arts 27:173. 1892.

Two varieties are recognized under this species, as follows:

- 1' Peduncular hairs without purple crosswalls; leaves widest at or near the middle; Michoacán ......var. michoacanum
- Alloispermum michoacanum var. michoacanum. Sabazia michoacana B.L. Robins., Proc. Amer. Acad. Arts 27:173. 1892. Sabazia liebmannii var. michoacana (B.L. Robins.) Longpre.

Known only from Michoacán in pine-oak forests, 2000-3100 m.

Alloispermum michoacanum var. liebmannii (Schultz-Bip. ex Klatt) B. Turner, comb. nov. BASIONYM: Sabazia liebmannii Schultz-Bip. ex Klatt, Leopoldina 23:90. 1887. Not Alloispermum liebmannii (Schultz-Bip. ex Klatt) H. Robins., Phytologia 38:412. 1978, which is based upon Calea liebmannii Schultz-Bip. ex Klatt, Leopoldina 23:145. 1887. Sabazia liebmannii Schultz-Bip. ex Klatt var. liebmannii.

Sabazia liebmannıı var. hintonii Longpre. Sabazia liebmannii var. ovatifolia Longpre.

México State, Guerrero and Oaxaca in pine-oak woodlands, 2000-2900 m. A variable taxon but readily distinguished from var. michoacanum by the characters given in the above couplet.

- Alloispermum palmeri (S. Wats. ex A. Gray) Fernandez & Urbatsch, comb. nov. BASIONYM: Calea palmeri S. Wats. ex A. Gray, Proc. Amer. Acad. Arts 22:430, 1887.
- Alloispermum palmeri var. lancifolium (Urbatsch & B. Turner) Fernandez & Urbatsch, comb. nov. BASIONYM: Sabazia palmeri var. lancifolia Urbatsch & B. Turner, Brittonia 27:353. 1975.
- Alloispermum tridacoides (Urbatsch & B. Turner) Fernandez & Urbatsch, comb nov. BASIONYM: Sabazia tridacoides Urbatsch & B. Turner, Brittonia 74:351, 1975.

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## LITERATURE CITED

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